INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001333

CLASSIFICATION OF SUBJECT MATTER A. Int. Cl. 7: A61K 39/00, A61P 37/02 According to International Patent Classification (IPC) or to both national classification and IPC FIELDS SEARCHED B. Minimum documentation searched (classification system followed by classification symbols) Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) DWPI, Medline; Keywords; Tolerance, Modulation, Skew, Alter, Immune, Th1, Th2, Hyperimmunisation, Hyperimmunization, Adjuvant, Antigen, Secondary Antigen Challenge, Oral Tolerance, Alum, Freud, Aluminum Hydroxide, vaccine, rheumatoid arthritis, multiple sclerosis, thyroiditis, Crohn's disease, systemic lupus erythematosus DOCUMENTS CONSIDERED TO BE RELEVANT C. Relevant to Category* Citation of document, with indication, where appropriate, of the relevant passages claim No. Castro AG et al, "Anti-interleukin 10 receptor monoclonal antibody is an adjuvant for T helper cell type 1 responses to soluble antigen only in the presence of lipopolysaccharide", J Exp Med, 20 November 2000, vol 192, No. 10, pages 1529-1534 1-51 \mathbf{x} Abstract, Material and Methods, figure 2 Peng H-J et al, "B-cell depletion fails to arrogate the induction of oral tolerance of specific Th1 immune responses in mice", 2000, Scand. J Immunol, vol 51, pages 454-1-51 Abstract, Material and Methods \mathbf{X} See patent family annex Further documents are listed in the continuation of Box C Special categories of cited documents: later document published after the international filing date or priority date "A" document defining the general state of the art and not in conflict with the application but cited to understand the principle which is not considered to be of particular or theory underlying the invention relevance document of particular relevance; the claimed invention cannot be "E" earlier application or patent but published on or after the international filing date considered novel or cannot be considered to involve an inventive step when the document is taken alone document of particular relevance; the claimed invention cannot be "1" document which may throw doubts on priority considered to involve an inventive step when the document is combined claim(s) or which is cited to establish the publication date of another citation or other special with one or more other such documents, such combination being obvious to a person skilled in the art reason (as specified) "O" document member of the same patent family document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but later than the priority date claimed Date of mailing of the international search report Date of the actual completion of the international search 27 OCT 2004 21 October 2004 Authorized officer Name and mailing address of the ISA/AU **AUSTRALIAN PATENT OFFICE** PO BOX 200, WODEN ACT 2606, AUSTRALIA ANTHONY MURFETT E-mail address: pct@ipaustralia.gov.au Facsimile No. (02) 6285 3929 Telephone No: (02) 6283 2243

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ategory*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
x	Wu X et al, "Selective suppression of antigen-specific Th2 cells by continuous microdose oral tolerance", Eur J Immunol, Jan 1998, vol 28, pages 134-142. Abstract, Material and Methods	. 1-51
х .	Jilek S et al, "Antigen-independent suppression of the allergic immune response to bee venom phospholipase A2 by DNA vaccination in CBA/J mice", J Immunol, 2001, vol 166, pages 3612-3621 Abstract, page 3613 left column paragraph 5 - right column paragraph 3, figure 3	1-51
Α .		
х	Melamed D et al, "Peripheral tolerance of Th2 lymphocytes induced by continuous feeding of ovalbimun", Int Immunol, May 1996, vol 8, no 5, pages 717-724. Abstract, Table 3, Material and Methods	1-51
x	Kim JH and Ohsawa M, "Oral tolerance in ovalbumin in mice as a model for detecting modulators of the immunologic tolerance to a specific antigen", Biol Pharm Bull, 1995, vol 18(6), pages 854-858. Abstract, Material and Methods	1-51
x	von Herrath MG et al, "Tolerance Induction with Agonist Peptides Recognized by Autoaggressive Lymphocytes is Transient: Therapeutic Potential for Type 1 Diabetes is Limited and Depends on Time-point of Administration, Choice of Epitope and Adjuvant", J Autoimmun, May 2001, 16(3), page 193-9 Abstract, "peptide and immunization schedules" page 194	31-36, 51
x ·	Moreland LW et al, "T Cell Receptor Peptide Vaccination in Rheumatoid Arthritis", Arthritis and Rheumatism, November 1998, vol 41, no 11, pages 1919-1929. Abstract	31, 35-36, 5
x	WO 2001/052886 A (Alfred Hospital et al) 26 July 2001 Abstract, page 19 lines 14-31	35-36, 51
P, X	Tobagus IT et al, "Adjuvant costimulation during secondary antigen challenge directs qualitative aspects of oral tolerance induction, particularly during neonatal period", 2004, J Immunol, vol 172, pages 2274-2285. Entire document, especially page 2278 right column paragraph 1.	1-51

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU2004/001333

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member					
wo	0152886	AU	26573/01	CA	2402831	EP	1409011
		US	2003191076	ZA	200206657		